DOCUMENT RESUME

ED 230 210 JC 830 154

AUTHOR Matulich, Loretta
TITLE Contract Learning in the Traditional Technical Writing Class.
PUB DATE Apr 83
NOTE 15p.; Paper presented at the Annual Convention of the American Association of Community and Junior Colleges (63rd, New Orleans, LA, April 24-27, 1983).
PUB TYPE Viewpoints (120) -- Tests/Evaluation Instruments (160) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Community Colleges; *Content Area Writing; Course Descriptions; Course Objectives; *Performance Contracts; *Technical Writing; Two Year Colleges
IDENTIFIERS *Clackamas Community College OR

ABSTRACT

At Clackamas Community College, a system of contract learning has been adapted for use in a technical writing class. The course focuses on teaching the essentials of technical writing (i.e., clarity and organization in report writing); the basic employment attitudes that local businesses and industries expect; and the form of writing that the student's major field demands. After spending half of the course learning the core elements of technical writing, the contract learning process begins. The learning contract specifies objectives, resources and strategies, target date for the completion of a final project, evidence of learning, and evaluation of learning. In this second part of the course, students and instructors agree upon the types of reports to be produced, e.g., lab reports for science majors or feasibility reports for accounting majors. Students select resources (e.g., texts or library materials) or resource people (e.g., content area faculty or experts in their field) to advance their research or experimentation; and meet in weekly conferences with the technical writing instructor. On the basis of a final report and oral presentation, the technical writing instructor with input from the outside resource people assigns the course grade. The contract learning process has brought out students' creativity, self-confidence, and organizing ability and has provided a medium for communication with business and industry. Relevant forms are appended. (HB)

**********
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
**********

ED230210

# CONTRACT LEARNING IN THE TRADITIONAL TECHNICAL WRITING CLASS

Loretta Matulich

Clackamas Community College
Oregon City, Oregon 97045

Presented at the 63rd annual convention of the American Association of Community and Junior Colleges, New Orleans, Louisiana, April 24-27, 1983.

JC 830 154

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

L. Matulich

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☒ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

Loretta Matulich
Clackamas Community College
Oregon City, Oregon 97045

# CONTRACT LEARNING IN THE TRADITIONAL TECHNICAL WRITING CLASS

Old skins, new wine? Or, is it "traditional structures, contemporary methods"? Whether one prefers the metaphor or the jargon, it makes no difference. It is all the same product when we adapt contract learning to the traditional lower division technical writing class in the community college. Individual student writing projects ferment from the essential forms and organization of technical writing, the expectations of the local business and industrial community, and the students' own major fields of study. The yield is too manifold to detail totally in a short article, but let me try to give you a taste of how a technical writing course can be a part of the lower division transfer composition sequence while still contributing to the students' individual majors and respecting the local community.

In most states lower division transfer courses carry full face value by the State System of Higher Education so that students can receive full credit for these courses when they transfer to the state universities, usually in their sophomore or junior year. Presently in Oregon, aside from the required year of a literature or humanities sequence, pure freshman composition is required by all the state

community colleges and state universities for their Associate and Bachelor degrees. The number of quarters of freshman composition varies, however, from school to school. At Clackamas Community College, where I teach, we require a full three terms, i.e., one year of transfer credit freshman composition for the Associate of Arts degree from our school. It is within this framework, then, that one term of lower division transfer technical writing can be taken in lieu of the second or third quarter of freshman composition. Or, a few students choose to take it as an English elective apart from the required year of freshman composition. Up to this time the course is offered usually one term, and never more than two terms, per academic year.

The community college setting must be defined too at this point. First, by its very nature, the community college is tied into the lives, businesses, and industries of its local citizens. It is understood that most of the students who study at the community college will go back into the local community to work and live once their program of study is complete.

Second, the community college English composition classes, and particularly the transfer technical writing classes, are composed of students whose majors range all the way from accounting to zoology. It is typical in one class of transfer technical writing to have students from the areas of accounting, biology, business administration, chemistry, computer science, drafting, engineering, fire science, geology, physics, pre-med, waste water technology, and zoology. As an observer can quickly perceive, the challenge is to create a technical writing course in which each student can learn the essentials of technical writing,

the basic employment attitudes that the local businesses and industries expect, and the form of writing that his major field demands. It was with these three objectives in mind--the essentials of technical writing, the expectations of the local community, and the varied individual majors of the students in one class--that I adapted the contract learning system to the traditional technical writing course. The contract learning system was one means by which I could reinforce throughout the whole term the essentials of technical writing while getting the students out into the local community and urging them to write in the content areas and within the structural forms of their particular majors.

The essentials of technical writing are, of course, clarity of prose and organization in writing for business and technological industries. The first half of the course, then, concentrates on these elements of clarity and organization in definition papers, descriptions of mechanisms, the basic structure of a formal technical report, and some business correspondence. For these essentials the class meets together in the traditional classroom format at the scheduled times. Once the whole class has covered the core elements of technical writing, about four weeks into the course, the contract learning process begins in order to tackle the next two goals--acquainting the students with the expectations of the community's businesses and industries and acquainting the students with the types of writing their own particular major does and will require.

The writing contract itself is set up very simply. (See Handout #1.) In the first and second columns from the left, we have Objectives and

Resources and Strategies. In other words, the student must decide for himself, but always with guidance from the instructor, just what he needs to learn. This is recorded in the Objectives column. I always make it known to the student that he needs to know how to do at least one type of technical report. Often, though, the student responds that he wants to learn to do at least two different types of technical reports. Science majors frequently list in the Objectives column that they want to learn to do a formal lab report and a shorter progress report on their experimentation. They conduct experimentation on their own in their own fields, but always under the supervision of a science instructor. Accounting majors often want to learn how to do a feasibility report as one of the Objectives. An example is one student who wrote a feasibility report after she had investigated whether a locally owned bank she had worked for should install an in-house computer system or continue to use a data processing service out of Portland. A third student elected to do a feasibility report on a certain type of satellite communication for nationwide businesses. For his Resources and Strategies in the content area, he sought outside expertise from a local engineer in the field and even from the inventor of the system who lived 1,000 miles away from him. Both of these students used the class textbook for their Resources and Strategies for the writing form of the feasibility report.

One student in business administration felt that he needed to know more about business communications, so he listed as his Objectives many types of business communications as well as a progress report. He then arranged with the business communications instructor to sit in on her classes and learn the theory behind each type of business communication.

This class as well as the business communications textbook became his Resources and Strategies. While he was in the class for about seven weeks, he wrote up his progress report. By the end of the term he produced a whole portfolio of all types of business communications as well as a written analysis of each sample in the portfolio. At the end of the quarter he felt he had learned so much via this contract system in technical writing that he took the advice of the business teacher and challenged the business communications course. By means of the challenge exam, he earned an extra three quarter hours in business, a bonus that he had not anticipated at the outset of the term.

These, then, are some examples of what types of Objectives, Resources and Strategies, and technical writing projects students can opt for. The Objectives are always worked out with and approved by the technical writing instructor. At the beginning of the term, the students sign up for individual weekly conferences that are held in the instructor's office for ten minutes each session. During these conferences my job as instructor is manifold. I must draw out from the students what their present needs and interests are in technical writing and their projected use of technical writing in their own profession. I am there to spark the discovery of where resources can be found and what kind of strategies the students can employ. Constantly I monitor the gathering of the data and the writing up of the projects to insure that the essentials of technical writing are maintained and that the students apply them concretely to their writing in their own major field.

Although I must keep mentally alert in playing this role of catalyst, overseer, and conductor for perhaps twenty-five little orchestras all going at the same time, it is not all that difficult because once the

Objectives are established, the Resources and Strategies are easy to determine. For example, if the student wants to learn to do a formal lab report on his own experimentation, I can then question him on how he will verify his scientific data once they are collected and where he can get instructions on and samples of lab reports. The student will often suggest his technical writing textbook, his own science textbooks, the library holdings, and his science instructor. It is up to him, then, to find lab report instructions and to check with the science instructor to see whether that teacher will consent to guide him through the content area of his lab report. Not all student projects need cooperating faculty nor outside experts; but where I have not felt competent to evaluate the content area, it has been my fortunate experience at Clackamas that instructors from all the departments whom the students contacted for this kind of help were most anxious to do all they could for the students.

Once the Objectives and Resources and Strategies have been established, that is, the student knows what he wants to learn and knows where to get his information and how to proceed, he then has to determine a target date to complete his technical writing project within the instructor's deadline already set up for the whole class. Students who have other faculty or outside experts guiding them in their content area will naturally have to set a target date for themselves early enough so that the cooperating faculty or outside experts will be able to read through and evaluate the final project in the content area. On the general deadline date, oral presentations of each student's technical writing project begin. Business and industry require competent speakers of English, and students learn from each other's research methods and

and procedures through the oral presentations.

The final written project and the oral presentation to the whole class are obviously the Evidence of Learning, the fourth item on the written contract form.

Lastly, Evaluation of Learning is the grade from the technical writing instructor and in pertinent cases an advisory grade on the content from the cooperating faculty member or outside expert. (See Handout #2.) It has been my personal experience that the cooperating instructors from other fields are most obliging and have given the students many helpful critiques on their work and research. Outside experts have also been generous with their time. Last year one student consulted the head engineer at a battery manufacturing plant where he worked, and another was aided and evaluated by an engineer in satellite communications, as I mentioned earlier. The technical writing instructor, of course, evaluates the paper on the essentials of technical writing itself--those of clarity, organization, and structure. Taking into consideration the content area grade from the cooperating instructor, if there be one, the technical writing instructor gives the final grade.

The students, too, have an opportunity to evaluate the contract learning process and their own progress in order to help the instructor assess the process and improve it. (See Handout #3.) They have commented particularly that now they know they can carry out a project on their own, that they have to budget their time, and that they have discovered that they now want to learn more about the area which they have just studied.

In addition, I have noticed that the contract learning process often calls out the creativity, self-confidence, initiative, and organizing ability of the responsible but often quiet student in the classroom. It

frequently evokes an interest and even pleasure in writing from students who were never encouraged to write extensively in their own major fields of interest and study. It provokes students to think about and start to work on the types of writing they will have to do in the future.

As an instructor, I continually evaluate the contract learning process also. First, this approach takes energy and acumen because of the weekly (and sometimes more-than-weekly) individual conferences with the students as they progress from the initial writing up of the contract, through the consultation on Resources and Strategies, and finally into the writing process itself. In order to allow time for student conferences in accord with my schedule and the students' schedules, once the contract process starts, the technical writing class will meet fewer hours per week and use the remainder of the class time for some student conferences. Other conferences are held during special office hours for technical writing students only.

The contract process is a way, also, for the community college to communicate with local businesses and industries via the academic medium. Students find out personally what expertise they need to have in writing (as well as in reading and speaking) through their interviews, consultations with, and evaluations by knowledgeable persons in their own fields.

On the community college campus, too, the contract process demonstrates to the students that composition is a component in other technical disciplines. The need to write clearly and in an organized fashion is reinforced by faculty in science and business when the student requests guidance in technical writing projects.

The technical writing instructor gains, too, by the generosity of other faculty members and outside experts who help her students. (After

all, I have to read all the technical writing projects!) No one faculty member in a cooperating discipline is, though, overburdened with too many students asking for his extra advice and time. I make sure of that by keeping a tally of which faculty are helping which students. And lastly, I see to it also that all cooperating faculty as well as outside experts get a note of thanks after they have completed the content evaluation of the students' technical writing projects.

Handout #1

Matulich

LEARNING CONTRACT

Learner _____

| Objectives (What are you going to learn?) | Resources and Strategies (How are you going to learn it?) | Target date for completion. | Evidence of Learning (How are you going to know that you learned it?) | Evaluation of Learning (How are you going to prove that you learned it? Who will grade your projects?) |
|---|---|---|---|---|
| | | | | |

Thanks to Whatcom Community College, Bellingham, WA

# EVALUATION OF STUDENT LEARNING CONTRACT

The evaluation of a completed learning contract is a crucial step in conveying to the student how well you perceive he/she learned what was outlined in the contract. Review the learning contract before you write the evaluation and be specific in your responses. Please share the evaluation with the student.

Student _____ Course _____

1. On what are you basing your evaluation? (papers, supervisory observation, oral evaluation, etc.)

2. Evaluate the student's fulfillment of each learning objective as specifically as possible.

3. Do you recommend a: ( ) Pass ( ) Fail ( ) Letter Grade

Evaluator's signature _____ Date _____

Thanks to Whatcom
Community College
Bellingham, WA

## SELF-EVALUATION

## GUIDELINE

The only person who really knows how much you have learned through your learning contract is YOU. Writing a self-evaluation provides you the opportunity to reflect on the academic and personal growth that has occurred as a result of your involvement with your learning contract. When composing the self-evaluation, you might think about the following questions, but feel free to respond in any way that provides a well thought out and sincere evaluation of your learning contract experience.

1. Did I learn what I originally thought I was going to learn? What objectives were met and which were not?

2. What were some of the unanticipated learnings?

3. Why was I not able to achieve some of my expected goals?

4. What have I learned about myself as a result of being involved with the learning contract experience?

5. What have I learned about my ability to learn independently through a learning contract?

6. What new subject areas do I want to explore as a result of this learning experience?

7. What factors do I consider contributed to this learning experience being worthwile (or not worthwhile)?

8. If I were going to do another learning contract, what would I do differently to maximize the value of the learning experience?

ERIC Clearinghouse for Junior Colleges
8118 Math-Sciences Building
University of California
Los Angeles, California 90024

JUN 24 1983



Thanks to Whatcom Community College, Bellingham, WA